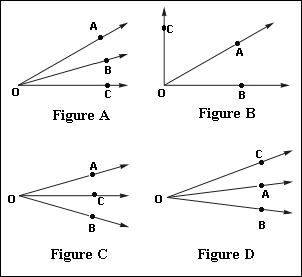
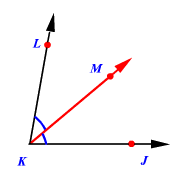
*CLASS COPY – DO NOT WRITE ON THIS!*

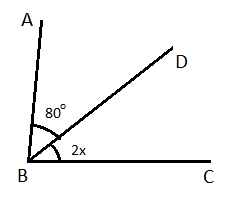
CW#8: Bisecting Angles

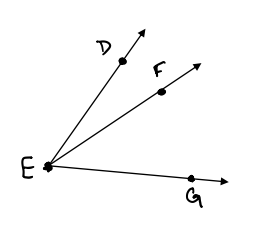
Geometry



Copy Figures A – D into your notebooks. Using the angle measures in each figure, write a definition for an angle bisector.

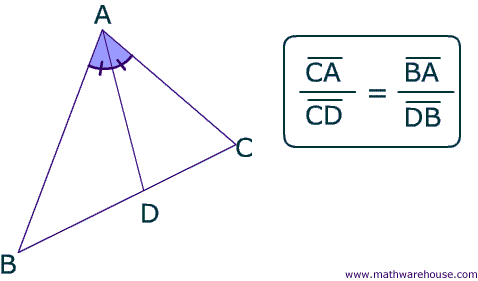
1. bisects . If , what is and ?



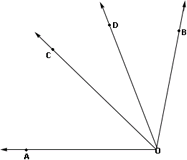
1. bisects .
   1. Find the value of x.
   2. Find

For #3 – 7, bisects .

1. If , find
2. If find
3. If and , find the value of x.
4. If and , find the value of x.
5. If and , find the .



1. bisects angle . Find if .
2. is bisected by , and . Draw the figure and find the value of x. What is the ? What is the ?



1. is bisected by is bisected by
   1. If ,

Angle Bisector Constructions

|  |  |  |
| --- | --- | --- |
| 1. With one point of the compass on the vertex of the angle, draw an arc that intersects both sides of the angle. | 2. Draw an arc from each of these points of intersection so that the arcs intersect in the interior of the angle. The compass needs to stay open the same amount throughout this step. | 3. Draw the ray from the vertex of the angle to the intersection of the two arcs drawn during the previous step. |
|  |  |  |

